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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,692	08/03/2006	Karl-Josef Olfisch	278071US6PCT	4126
22850	7590	02/03/2009		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
SZEWCZYK, CYNTHIA				
ART UNIT		PAPER NUMBER		
1791				
NOTIFICATION DATE		DELIVERY MODE		
02/03/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/550,692

**Applicant(s)**

OLLFISCH ET AL.

**Examiner**

CYNTHIA SZEWCZYK

**Art Unit**

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. The 112 2<sup>nd</sup> paragraph rejections have been withdrawn.
2. The 103 rejection in view of BALDUIN has been withdrawn.

***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 16-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over SCHIEL et al. (DE 101 05 200 A1).

SCHIEL teaches a method and device for bending glass panes. SCHIEL teaches that the glass is laid on a concave bending frame (3 in figures) and the glass is prebent under gravity (para. 4, lines 2-3) as the concave bending frame in instant claims 16 and 25. SCHIEL shows that the glass is transferred onto another concave frame (5 in figures) as the transfer former in instant claims 16 and 25. SCHIEL shows that the glass is moved to another concave frame (7 in figures) as the final bending former in instant claims 16 and 25. Figures 1-6 of SCHIEL show that the bending frames are arranged vertically above each other and move in vertical directions as in instant claim 16. It would have been obvious that the softened hot glass sheet (para. 43, line 7) placed on the final bending frame would continue to sag until cooled and solidified, as in instant claim 16. SCHIEL discloses that the forming frames may be used as transport means (para. 21, lines 2-3), and would therefore be capable of being carried to the cooling station on the final bending station to the cooling area (para. 43, lines 7-10) as

in instant claims 16 and 25. SCHIEL discloses that the prebending frame can be a forming frame, wherein the transfer former is a solid mold that can pass through it (para. 21, lines 3-6) which would mean that the dimensions of the transfer former must be smaller than the dimensions of the prebending former and final bending former as in instant claims 16 and 25.

SCHIEL discloses that the molds are able to move height wise by a drive (para. 34, line 3) as in instant claim 25. SCHIEL discloses that the glass is brought to the softening temperature in a furnace (para. 32, line 3) as in instant claim 25.

Regarding claim 17, SCHIEL discloses that a pressure difference is applied across the transfer former (para. 41, lines 2-4).

Regarding claim 18, it would have been obvious to one of ordinary skill in the art that the softened hot glass sheet (para. 43, line 7) placed on the final bending frame would continue to sag until cooled.

Regarding claim 19, SCHIEL discloses that there exists an upper former complementary in shape (4 in figures) that is used to press bend the glass (para. 39, lines 4-5).

Regarding claim 20, see the discussion of claim 17 above.

Regarding claim 21, it would have been obvious that the method and apparatus would have been capable of bending single panes of glass since molds are commonly used to shape single panes of glass.

Regarding claim 22, SCHIEL is silent as to the cooling method, but any well known method of cooling could be applied. One such method of cooling that is well

known in the art is quenching, in which the glass is cooled rapidly and thus toughened. It would have been obvious to quench the glass of SCHIEL because SCHIEL discloses that the glass is typically used for windshields (para 1, lines 4-5) which require toughened glass in order to protect the driver during accidents.

Regarding claim 23, SCHIEL discloses that the method and apparatus is used for bending pairs of glass.

Regarding claim 24, SCHIEL discloses that the shaped glass is cooled when the shaping is complete (para. 43, lines 9-10) as in instant claim 24.

Regarding claim 26, SCHIEL discloses that the transfer former produces a depression (para. 38, lines 7-9).

Regarding claim 27, SCHIEL discloses that the transfer former is a solid concave surface (para. 15, line 3).

Regarding claim 28, see the discussion of 19 above.

Regarding claim 29, SCHIEL discloses that the upper former helps produce a pressure differential by keeping the top of the glass sheets at atmospheric pressure while a depression is applied to the transfer former (para. 40, lines 5-7).

Regarding claim 30, SCHIEL discloses that the upper former is a convex surface (para. 33, line 1). Figures 1-6 of SCHIEL show that the upper former appears to have a solid surface.

***Response to Arguments***

5. Applicant's arguments with respect to claims 16-30 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CYNTHIA SZEWCZYK whose telephone number is (571)270-5130. The examiner can normally be reached on Monday through Thursday 7:30 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven P. Griffin/

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Supervisory Patent Examiner, Art  
Unit 1791

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